

1913

U. S. DEPARTMENT OF AGRICULTURE

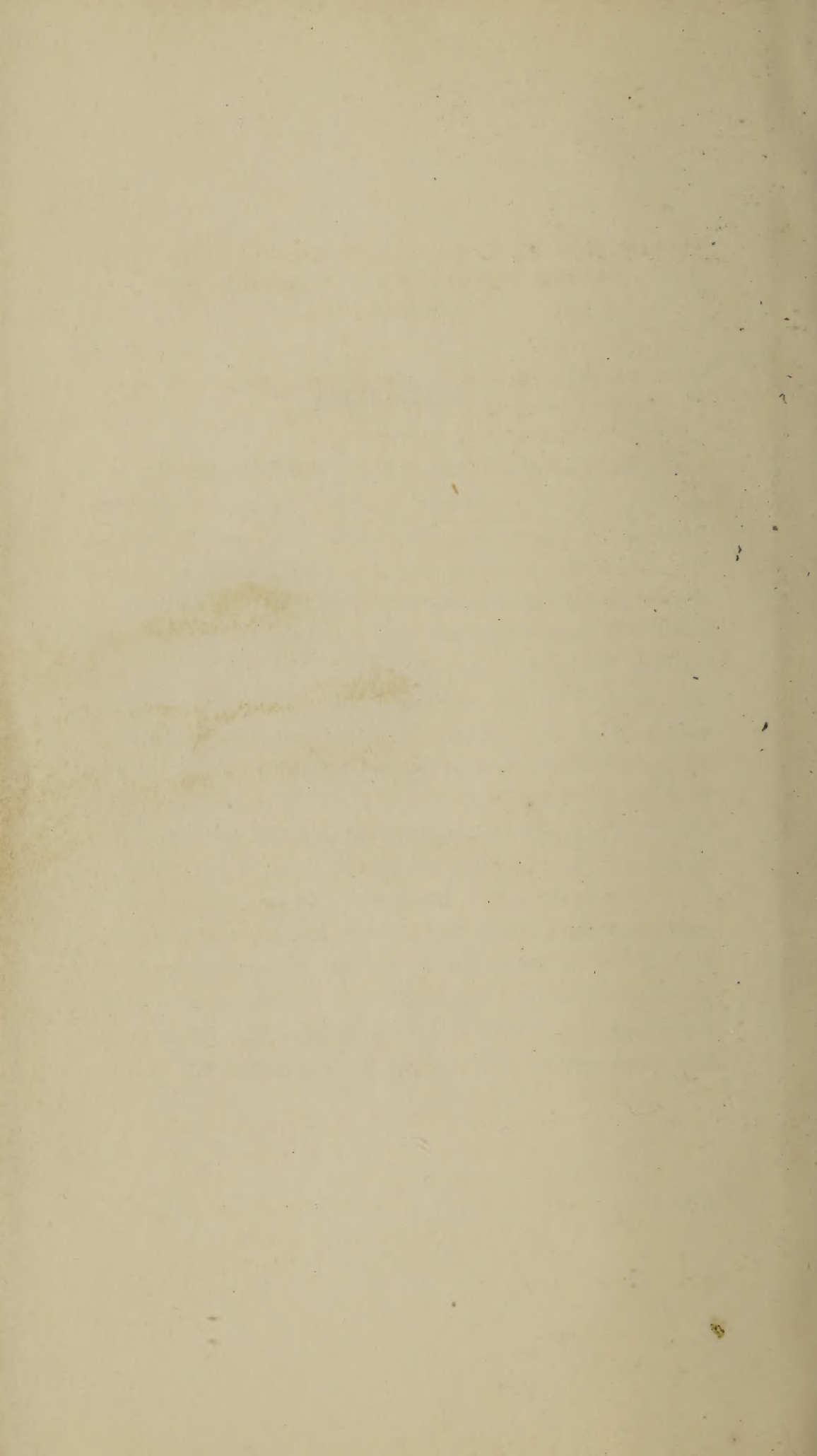
BUREAU OF PLANT INDUSTRY

FIELD NOTES

FORAGE CROP INVESTIGATIONS

INSTRUCTIONS.

In case of a series of row or plat tests it is desirable to have all the constant conditions recorded for future reference. This can be done on the blank pages in the front of the book for all points not covered by the topic headings. In case several sets of experiments are recorded in a single book the conditions governing each may be given by filling in the outlines provided. (See pp. 7-11.) The blank pages may also be used for any additional data which seem desirable, such as the high, low, and mean temperatures, rainfall, date of the last killing frost in the spring, and of the first killing frost in the fall. At the back of the book are blank pages for convenience in making field calculations and temporary notations. Row numbers should be listed in the order that they occur in the field. Records should be made in rate per cent wherever possible and in such manner that the better the variety or strain the higher the percentage recorded. Rules given under "Explanation of heading and abbreviations used" should be followed, in order that the notes on any given crop may be uniform for all the stations.



EXPLANATION OF HEADINGS AND ABBREVIATIONS USED IN TAKING FIELD NOTES IN FORAGE-CROP INVESTIGATIONS.

SIZE OF PLAT.—Stated in fractions of an acre, as $\frac{1}{5}$, $\frac{1}{10}$, etc., or if nursery rows, length of the row in feet.

RATE OF SEEDING.—Pounds per acre.

STAND.—Given in percentages or number of plants in the row.

DATE.—Given in figures, as 9-15 (September 15).

UNIFORMITY.—Given in percentages.

VIGOR.—Strength or abundance of growth: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

CONDITION.—If the crop is biennial or perennial, give percentages showing what portion has survived the winter.

FOLIAGE COLOR.—Indicate the shade of green as follows: *g.*=green; *l. g.*=light green; *d. g.*=dark green; *y. g.*=yellowish green; *g. g.*=grayish green; *p. g.*=purplish green. The superlative degree of any of these colors may be indicated by placing *v.* before the color abbreviations, as follows: *v. l. g.*=very light green.

HABIT OF GROWTH.—Described by the following terms: *e.*=erect; *s. e.*=suberect; *d.*=decumbent (prostrate, tip ascending); *p.*=procumbent (trailing); *v.*=vining; *b.*=bushy.

STEMS PER PLANT.—Average number of stems produced from one seed, as 7-8.

MEASUREMENTS.—Given in inches unless otherwise indicated.

DISEASE RESISTANCE.—Give the percentage of noninfection, best determined by estimating the percentage of infection and subtracting this from 100.

DROUGHT RESISTANCE.—Indicate the comparative vigor of plants under conditions of drought, as follows: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

LODGING.—Described as *none*, *little*, *medium*, *much*.

SHATTERING.—Described as *none*, *little*, *medium*, *much*.

QUALITY.—Indicated as follows: *p.*=poor; *f.*=fair; *g.*=good; *ex.*=excellent.

ABBREVIATIONS.

GENERAL.—*v.*=very; *med.*=medium; *p.*=poor; *g.*=good; *ex.*=excellent (indicates an unusually high degree, seldom occurring); *l.*=little; *m.*=much; *o.*=none or nothing; *lg.*=long; *s.*=short; *sm.*=small; *lrg.*=large; *ab.*=abundant; *few*=few; *cs.*=coarse; *sl.*=slender.

COLOR.—*v.*=violet; *i.*=indigo; *b.*=blue; *g.*=green; *y.*=yellow; *o.*=orange; *r.*=red; *pur.*=purple; *pk.*=pink; *l.*=light (used before a color); *d.*=dark (used before a color).

SHAPE.—*ov.*=oval; *rd.*=round; *obl.*=oblong; *lin.*=linear; *obo.*=obovate; *cor.*=cordate; *cyl.*=cylindrical; *elip.*=elliptical.

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

Test of _____, 19____

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Test of _____, 19____

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Test of _____, 19

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

Test of _____, 19

Object _____

Location _____

Kind of soil _____

Character of field _____

Previous crop _____

Preparation of seed bed _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Seeding method _____

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

..... Test of, 19.....

Object

Location

Kind of soil

Character of field

Previous crop

Preparation of seed bed

1.

2.

3.

4.

5.

6.

Seeding method

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Un- plants if miformity
F.C.J. 1818	S.Y.	8 rds.	3.3 ft	6/2/13		2 yes
1819	S.Y.	8 rds		6/2/13		5 yes
1820	S.Y.	8 rds		6/2/13		No
1821	O.Y.	8 rds		6/2/13		No
1822	S.Y.	8 rds		6/2/13		30 yes
1824	S.Y.	8 rds		6/2/13		90 yes
1829	O.Y.	8 rds.		6/2/13		60 yes
1830	O.Y.	8 rds.		6/2/13		60 no
1831	O.Y.	8 rds.		6/2/13		50 yes
1833	O.Y.	8 rds.		6/2/13		95 yes
1837	S.Y.	8 rds.		6/2/13		65 yes
1838	S.Y.	8 rds		6/2/13		50 yes
1839	S.Y.	8 rds		6/2/13		60 yes
1844	S.Y.	8 rds		6/2/13		25 yes
1846	O.Y.	8 rds		6/2/13		35 yes
1851	S.Y.	8 rds		6/2/13		60 No
1852	S.Y.	8 rds.		6/2/13		85 yes
1853	S.Y.	8 rds		6/2/13		80 yes
1854	S.Y.	8 rds		6/2/13		20 no
1857	S.Y.	8 rds		6/2/13		40 yes

Bloom Maturity Stems
 Date Color Harvested Season Diam-eter Height Type

7/28	P	10/8		36-40	Vat tip	
7/28	P	10/8		30-48	V. all tip	
7/28	WP	10/8		48	V. all T	
7/28	P W			48	V. all T	
7/28	W	10/8		48-52	Vat tip	
7/28	P	10/3		36-42	$\frac{1}{2}$ no tip	Slender
7/28	WP	10/8		48-52	Vat tip	
7/28	W P	10/8		24-30	B	
7/28	P W	9/26		24-30	Vat tip	
7/28	P	9/26		32-36	$\frac{1}{2}$ no tip	Slender
7/28	P W	10/8		24-36	B	
7/28	W P	10/8		24-36	B	
7/28	P W	10/8		30-42	Vat tip	
7/28	W P	10/8		36-42	Vat tip	
7/28	W	10/8		24-36	Vat tip	
7/19	P W	10/8		24-30	B	
7/22	W	9/26		22-26	B	
7/22	W	9/26		22-26	B	
7/22	P W	10/8		18-30	B	
7/22	W P	10/8		28-36	B	

Branches			Leav			
Habit	No.	Height	Size	No.	Color	Per-sisting

As. E. Ma L No

As. E. Ma L No

As. Spr. Ma L No

As. Spr. Ma L No

As. Spr. Ma L No

As; E. Ma L Me Ma - No

As. Spr. Ma L Me Ma No

As. Spr. Ma L Me Ma No

As. Spr. Ma L Me Ma No

As. Me L Me Ma No

E. Spr. Ma L Me Ma No

E. As. Ma L Me Ma No

As. Spr. Ma L Me Ma No

As. Spr. Ma L Me Ma No

As. Spr. Ma L Me Ma No

E. As. Ma L Me Ma No

As. E. Ma L Me Ma No

As; E. Ma L Me Ma No

As. E. Ma L Me Ma No

E. As. Ma L Me Ma No

Pods

1st. yellow	1st. mature	Size	Length	Shape	Seeds per pod	Pods per node	Color
			1 1/2-2 1/4	T	2-3		G
			1 1/2-2	T	2-3		Gr
			1 1/2-2	T	2-3		Gr
			1 1/2-2	T	2-3		Gr
Me		1 1/2-2	T		2-3	2-5	D
Me		1 1/4-1 3/4	S.F.		2-3	2-5	T
Me		1 1/2-2	T		2-3	2-6	D
			1 1/2-2	T	2-3-4	2-6	
			1 1/2-2	S.F.	2-3-4	2-5	G
Me		1 1/2-1 3/4	S.F.		2-3	2-5	G
			1 1/2-2	T	2-3	2-5	Pr
			1 1/2-2	T	2-3	2-5	T
			1 1/2-2	T	2-3	2-5	G
			1 1/2-2	T	2-3	2-5	G
			1 1/2-2	T	2-3	2-5	G
			1 1/2-1 3/4	T	2-3	2-5	G
Me		1 1/2-1 3/4	T		2-3	2-5	Gr
Me		1 1/4-1 3/4	T		2-3	2-5	Gr
			1 1/2-2 1/2	T	2-3	2-5	Gr
			1 1/2-2	T	2-3	2-5	Gr

Pubescence	Seed	Insect
Color	Amit. Color	Injury

gr	me	
----	----	--

gr	me	
----	----	--

gr.		
-----	--	--

gr, T		
-------	--	--

G		
---	--	--

T	me	
---	----	--

gr	me	
----	----	--

G, T.	me	
-------	----	--

G	me	
---	----	--

G	me	
---	----	--

T	me	
---	----	--

T	me	
---	----	--

G	me	
---	----	--

G	me	
---	----	--

G	me	
---	----	--

G, T	me	
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G	me	
---	----	--

G	me	
---	----	--

G, T	me	
------	----	--

gr.	me	
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Diseases	Yield		Seed Color	Rank
	Forage Green (lbs.)	Seed Dry (lbs.)		
Rust % Wilt % Nema % to dec %				
				Buddy mixed
			S.Y.	Good
			S.Y.	Good
			S.Y.	Good
			S.Y.	appearance as 1852

No.	Variety	Length	Width	Date Sown	Date Up	Stand	
		of Row	of Row			No. Plants	Uni-formity
F.C.O.							
1861	O.Y.	8 rds		6/2/13		30	yes
1871	O.Y.	8 rds.		6/2/13		30	yes
1881	S.Y.	8 rds		6/2/13			
1906	Bl.	8 rds		6/2/13		95	yes
1909	Bl.	8 rds		6/2/13		95	yes
3479	O.Y.	8 rds		6/2/13		50	yes
3689	O.Y.	8 rds		6/2/13		40	yes
3691	O.Y.	8 rds		6/2/13			no
5514	Br.						

Bloom Maturity Stems
 Date Color ^{Har-}vested ^{Diam-}Season ^{eter} Height Type

7/25 W P 10/8 24-30 B

7/28 P 10/8 24-30 B

7/25 P W 10/26 60-72 Vast

7/28 P 10/8 54-72 Vast

7/25 W 10/2 36-54 Vast

8/6 P 10/28 48 Vast

7/22 P 10/8 40-48 Vast

7/25 P W 10/30 18-60 —

Branches			Leaf			
Habit	No.	Height	Size	No.	Color	Per- sisting
E. az.	Ma	L	Me	Ma		no
E. az	Ma	L	Me	Ma		no
V. Sp.	Ma	W	Me	Ma		no
Ac. Sp.	Ma	L	Me	Ma		no
as Sp.	Ma	L	Me	Ma		no
Ac. Sp.	Ma	L	Me	Ma		no
as Sp.	Ma	L	Me	Ma		yes
—	—	—	—	—		—

es		Pods				
1st yellow	1st mature	Size	Length	Shape	Seeds per pod	Pods per node Color
		$1\frac{1}{2}$ -2	T		<u>2-3</u>	2-8 G
		$1\frac{1}{2}$ -2	T		<u>2-3</u>	2-8 G
		$1\frac{1}{2}$ -2	T		<u>2-3</u>	2-5 G
		$1\frac{1}{3}$ -2	M F		<u>2-3</u>	2-7 G
		$1\frac{1}{2}$ -2	M.F		<u>2-3</u>	2-7 G
		$1\frac{1}{2}$ - $1\frac{3}{4}$	T		<u>2-3</u>	2-6 T
		$1\frac{1}{2}$ -2	T		<u>2-3</u>	2-6 Br
		—	—		—	—

Pubescence	Seed	Insect
Color	Amit. Color	Injury

ln

ln

ln

ln

T

ly

—

Diseases			Yield		Seed (lbs.)	Seed Color	Rank
% Rust	% Wilt	% Nema- tode	Forage Green (lbs)	Dry (lbs)			

Ex.

Good

Ex. Try

also

Ex. Try

plus

Good

Good

Very badly mixed
selections made

No.	Variety	Length	Width	Date Sown	Date Up	Stand	
		of Row	of Row			No. Plants	Uniformity
01309	Singapore, England	8 rds		6/3/13			
01318	Newchwang, Manchuria	8 rds.		6/3/13			
01344	Southern Cotton Hil Co. (From England)	2 rds		6/6/13		75	yes
01539	China	2 rds		6/6/13		95	yes
01547	Pacific Hil Valls	2 rds		6/6/13		95	yes
01553	Yachow, China (For bean curd)	2 rds		6/6/13		95	yes
01554	Yachow, China (Cotton baled)	8 rds.		6/3/13		85	
01592	S.E. China, 25° N. (H. W. Smith)	2 rds		6/6/13		90	yes
01593	S.E. China, 25° N. (H. W. Smith)	2 rds		6/6/13		90	yes
01594	Haberlandt's yellow	2 rds					
01595	" brown	2 rds					
01596	" black	8 rds. 2 "		6/9/13			
01598	" brown	2 rds		6/6/13			
01624	Med Early Yellow (Wing Sub Co.)	2 rds				90	yes
01689	Early Brown	8 rds		6/3/13		90	90
01690	Brown very bean wood & Sun Va	8 rds.		6/3/13		90	
01713	Sable	8 rds.		6/3/13		95	
01714	Mongol	8 rds.		6/3/13		90	
01715	Mikado	8 rds		6/3/13		90	
01752	Selection from 1 to 50, Madison, Wis	2 rds		6/6/13		90	yes

Bloom Maturity Stems
 Date Color Harvest ed Season eter Height Type

Days

7/18	P	9/15	Selections made	
7/18	P W	9/15	Selections made	
7/16	P W	9/22	108	18-20
7/31	W P	10/2		30-36
7/16	W P	10/2		22-28
8/24	W			49-60 V & T
		10/30		30-36 B
8/11	W	10/15		30-40 V & T
7/25	W	10/15		18-24 B
7/16	P	9/22		
7/16	P	9/22		
7/18	P	9/18		24 V
7/16	P	9/22		
7/16/1	W	9/6		6-10 B
7/31	P	10/1		18-20 B
7/1	P	9/10		20-24 B
	W	10/28		36-42 B
7/19	P W	9/29		36-42 V & T
7/23	P	9/27		20-24 B
7/23	P	10/6		20-26 B
7/23	P	9/29		18-18 B

Branches				Leave		
Habit	No.	Height	Size	No.	Color	Per- sisting

As. Spr.	Ma	Me. L.	Ma	Ma	Me	No
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as. Spr	Ma	L	Ma	Ma	Me	No
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As. E. ✓	F	S	Ma	Ma	Me	No
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As. Spr.	Ma	L	Me	Ma	No	No
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as. E	Ma	Me. L.	Me	Ma	Me	No
-------	----	--------	----	----	----	----

as. Spr.	Ma	L	Me	Ma	Me	No
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As. E.	Ma	L	Me	Ma	Me	No
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as. V.	Me	L	M	M	+	No
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as. I	F	S	Ma	Ma	Me	No
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as. Spr	Ma	L, Me	Me	Me	Me	No
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as.	Ma	L	Me	Ma		No
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as	F	me	Ma	Ma		No
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as. E.	Ma	L	Me			No
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as	Ma	Me	Me	Me		No
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as	Ma	Me	Me	Me		No
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as. E.	Me	Me	Me	Me		No
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S	Pods					
	1st. Yellow	1st. Mature	Size	Length In.	Shape	Seeds Pods per Pod per Node Color

1 1/4 - 1 3/4 T 2-3 2-6 D

1 1/4 - 1 1/2 M.F 2-3 2-6 T

L 1 1/2 - 1 3/4 T 2-3 2-6 G

1 1/2 - 1 3/4 T 2-3 2-6 T

2-2 1/4 T 2-3 2-4 Lr

1 1/4 - 1 3/4 T 2-3 2-4 Br

1 1/2 - 2 T 2-3 2-5 T

M.F. 1 1/2 - 2 M.F 2-3 2-5 T

Me 1 - 1 1/2 T 2-3 1-3 T

Me 1 1/2 - 1 3/4 T 2-3 T

Me 1 1/2 - 2 T 2-3 2-5 T

Me 1 1/4 - 1.5 T 2-3 1-4 L

Me 1 1/2 - 1 3/4 M.F 2-3 2-6 '

1 1/2 - 2 T 2-3 2-8 T

1 1/4 - 1 1/2 T 2-3 2-8 T

1 1/2 - 1 3/4 T 2-3 2-6 T

Pubescence Color	Seed Amit. Color	Insect Injury
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G	Me	
---	----	--

T	Me	
---	----	--

Gr.	Me	
-----	----	--

T	Me	
---	----	--

en.	Me	
-----	----	--

T	Me	
---	----	--

Ta	Me	
----	----	--

T	Me	
---	----	--

T	Me	
---	----	--

T	Me	
---	----	--

T	Me	
---	----	--

5.5 T		
mostly T	Me	
T	Me	

T - a few		
gray.	Me	
T	Me	

Diseases			Yield		Seed Color	Rank
% Rust	% Wilt	% Nema- tode	Forage Green (lbs.)	Dry (lbs.)		

Badly mixed

Badly mixed

Try plot like 1547

a bunchy plants
selected out - 6 ft in heightfrom plot in
compar with Man

Ex. Heavy late

Sis. 5. 3 No.

Cf 17264, 17269

Sis. S. P. D. No.

Try row.

Ex Try plot

Sis. S. P. D. No.

same as
as 18227

Br. Poor

Like 17269

Cf. 1914

S.P. as 17268

Same

as 24610

Same as

17269

Try 2nd row

Cf. 17269

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Un- Plants iformity
01757	Ohio # 9035	8 rds.	3.3 ft.	6/3/13		85
01758	Ohio # 7406	8 rds.		6/3/13		80
01759	Ohio # 9035	8 rds		6/3/13		
01762	Manchuria from Ohio	8 rds		6/3/13		
01873	Manchuria from S. R. Coxe, Garden Engi.	2 rds		6/6/13		85 yes.
01983	Roosevelt	8 rds		6/3/13		90
01983						90 No

Bloom		Maturity		Stems	
Date	Color	Har-vested	Season	Diam-eter	Height Type

7/23	P	9/20		16-20	B
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7/19	P	9/27		14-20	B
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7/15	W	9/1			
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7/8	PW	9/12		22-26	B
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7/25	W	10/12		30-36	Vast tip
------	---	-------	--	-------	----------

7/23	P	9/27		24-28	B
------	---	------	--	-------	---

				18-30	B
--	--	--	--	-------	---

Branches				Leave		
Habit	No.	Height	Size	No.	Color	Per- sisting
As. E	Ma	L	Me			
As. E	Ma	L	Me			
As	Me	L	Me	me		No
As. Sp.	Ma	L	Me	mn		No
As	Ma	M	Me	Me		No
As. Sp	Me	Ma	me	Ma		No

S ₁	Pods					
	1st. yellow	1st. mature	Size	Length	Shape	Seeds per pod Pods per node Color

Me 1³/₄-2 T 2 2-7 G

L 2-2¹/₄ T 2 2-5 G

Me 1¹/₂-1³/₄ T 2-3 2-5 T, D.

Me 1¹/₂-2 T 2-3 2-5 M

Me 1¹/₄-1³/₄ T 2-3 2-8 T

Me 1¹/₂-2 T 2-3 2-6 G

Pubescence	Seed	Insect
Color	Color	Injury
G	M	
G	M	
T-G	Me	
gr.	me	
T	Me	
gr	me	

Diseases			Yield		Seed	Seed	Rank
% Rust	% Wilt	% Nema- tode	Forage lbs.	Dry lbs.	lbs.	Color	

Exp.

G
uniform

Badly mixed

appears same
as 17269

from

of with them, now again

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand	
						No. Plants	Uni- formity
1299		8 rds.	3.3 ft	6/3/13			
14953		8 rds.		6/8/13			
16790	Cloud	8 rds.		6/3/13		95	
17252C	Edna	8 rds.		6/3/13		95	yes
17254	Ebony	8 rds.		6/3/13	98	98	
17261	Snelfe	8 rds.		6/3/13			
17263	Annie	8 rds.		6/3/13		75	yes
17264	Tokyo	8 rds.		6/3/13		50	
17267	Hope	8 rds.		6/3/13		80	
17268	Ito Sam	8 rds.		6/3/13		95	
17269	med. yellow	8 rds.		6/13/13		90	
17271	Haberlandt	8 rds.		6/3/13		95	yes
17275	Amherst	8 rds.		6/3/13		90	yes
17276		8 rds.		6/3/13			
17278	Hollybrook	8 rds.		6/3/13		90	yes
17852	Meyer	8 rds.		6/3/13		75	yes
17861	Jat	8 rds.		6/3/13		95	no
17862	Shanwood	8 rds.		6/3/13		98	yes
18227	Chernic	8 rds.		6/13/13		95	
18259	Pinger	8 rds.		6/3/13		98	no

Bloom		Maturity		Stems	
Date	Color	Harvested	Season	Diameter	Height Type
				In	
7/15	W	9/2		12-18	B
		10/30		60-66	Vat T
7/28	P W	9/29		50-60	Vat T
7/28	P W	10/10		24-36	B
7/28	P W	9/27	1-1	30-36	Vat tip
7/19	P	9/27		20-24	B
7/28	W P	10/8		24-32	B
8/6	P	10/30		24-32	B
8/6	P W	10/30		24-32	B
7/15	P	9/10		20-24	B
7/23	P	9/27		24-26	B
7/23	W P	10/2	Me	22-26	B
7/23	P	9/27	me	18-22	B
7/16	W	9/9	Me	12-18	B
7/31	W	10/10	Me	24-28	B
7/23	P	10/6	Me	28-36	Vat T
7/25	P W	9/29	Me	36-42	Vat T
7/23	W P	9/29	Me	36-42	Vat tip
7/11	P	9/18	F	36	V L
7/24	P	10/6	Me	50-60	Vat tip

Branches				Leav		
Habit	No.	Height	Size	No.	Color	Per- sisting
As	Me	Me	me	Me		No
As Sp	Ma	L	Ma	Me		No
as. sr.	Ma	L				
As.	Me	Me	me	Ma		No
As. Spr.	Ma	L	Me	Me		No
As	Me	Me	me	Me		Yes
As	Me	Me	Me	Me		No
As	Ma	L	Me	Ma		No
As	Ma	L	Me	Ma		No
As	Ma	L	Me	Me		No
As	Ma	M	Me	Me		No
As	Ma	L	Me	Me		No
E	Ma	L	Me	Me		No
As	Me	me	me	me		No
As	F	me	Me	Ma		No
As. Spr.	Me	L	Me	Me		No
As. Spr.	Ma	L	Me	Me		No
As. Spr.	Ma	L	Me	Me		No
S. V.	Ma.	L	M	M		Yes
As. Spr.	Ma	L	Me	Me		Yes

es 1st. yellow	1st. Mature	Pods					Color
		Size	Length	Shape	Seeds per pod	Pods per node	

Me $1\frac{1}{2}$ - $1\frac{3}{4}$ T 2-3 2-4 L

~~Me~~ 2-2 $\frac{1}{2}$ T 2-3 2-4 G

Me. 1-1 $\frac{1}{2}$ M.F. 2-3 2-7

Me $1\frac{1}{4}$ -1.5 T 2-3 2-6 Br

✓ Me. 1-1 $\frac{1}{4}$ T 2-3 2-5 B

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-5 D

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-6 S

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-5 G

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-5 G

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-5 T

✓ Me $1\frac{1}{4}$ -1 $\frac{3}{4}$ T 2-3 2-8 T

✓ Me $1\frac{3}{4}$ -2 T 2-3 2-5 T

✓ Me $1\frac{3}{4}$ -2 T 2-3 2-6 T

✓ Me $1\frac{1}{2}$ -1 $\frac{3}{4}$ T 2-3 2-4 L

✓ Me 1-1 $\frac{1}{2}$ T 2-3 2-4 L

✓ Me $1\frac{1}{2}$ -2 $\frac{1}{4}$ T 2-3 1-5 Br

✓ Me. $1\frac{1}{4}$ -1 $\frac{1}{2}$ M.F. 2-3 2-7 T

✓ Me $1\frac{1}{2}$ -1 $\frac{3}{4}$ T 2-3 2-6

✓ M. $1\frac{1}{2}$ -2 S.F. 2-3 2-4 T

✓ Me 1-2 M.F. 2-3 2-5 T

Pubescence Color	Am't.	Seed Color	Insect Injury
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gray	me		
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gray	me		
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Gr. at ben tanning			
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+	me		
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T			
---	--	--	--

T			
---	--	--	--

G	me		
---	----	--	--

G			
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G	me		
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T	me		
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+	me		
---	----	--	--

T	me		
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T	me		
---	----	--	--

gray	me		
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G	me		
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T	me		
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G. & T	me		
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gray	me		
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T	me		
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G. a few tanning	me		
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Diseases		Yield		Seed	Seed	Rank
% Rust	% Wilt	% Nema- tode	Forage Green (lbs.)	Dry (lbs.)	(lbs.)	Color
						S. Y.
						Poor.
						Same as 17276
						S. Y.
						S. Y.
						S. Y.
						S. Y.
						S. Y.
						Identical with 1299
						Bl.
						S. Y.
						Bl.

No.	Variety	Length	Width	Date Sown	Date Up	Stand	
		of Row	of Row			No. Uni- plants	formity
19183	Wilson	8 rds					
19184	Fairchild	8 rds					
19186	Morse	8 rds				60	no
20405		8 rds					
20406		8 rds					
20412	Merko	8 rds					
20854	Tashing	8 rds				90	mod.
21079	Shington	2 rds		6/6/13		85	yes
21079A	Auburn	8 rds					
21999	Talia	8 rds				90	yes
22335		8 rds					
22876		2 rds		6/6/13		80	yes
23232	Barchet						
23232A							
23336							
24610							
25138		2 rds		6/3/13		95	
25468		8 rds		6/3/13			
25468		2.1		6/6/13			
26237		2 rds		6/6/13		25	no
27557		8 rds					

Bloom Date	Color	Maturity Harvested Season	Stems Diameter	Height	Type
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7/15	W P	9/27	Me	32-38	In
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7/15	P W	9/27		28-34	
------	-----	------	--	-------	--

7/23	W P	10/6	Me	36-48	
------	-----	------	----	-------	--

7/18	P W	9/18	✓	Badly mixed	
------	-----	------	---	-------------	--

7/11	P	9/18	Me	18-30	B
------	---	------	----	-------	---

7/15	W P	9/27	Me	42-48	V.
------	-----	------	----	-------	----

7/11	W P	9/9	Me	20-24	B
------	-----	-----	----	-------	---

7/23	W	9/27	Me	20-24	B
------	---	------	----	-------	---

7/14	W P	9/25	Me		B
------	-----	------	----	--	---

7/19 7/19	P + W	9/27	Me	30-36	W + T
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7/16	W	9/7	me	12-16	B
------	---	-----	----	-------	---

7/25	P	9/25	Me	16-20	B
------	---	------	----	-------	---

9/15	P				
------	---	--	--	--	--

9/15	P				
------	---	--	--	--	--

		10/38	Me	36-42	B
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9/20					
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7/18	P	9/15	✓	Me	20-24 B
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7/15	P	9/15			
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7/16	W P	9/22	Me	18-28	B
------	-----	------	----	-------	---

7/25	P	10/10	Me	26-32	B
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Branches			Leave			
Habit	No.	Height	Size	No.	Color	Per- sisting

as. Me Me Me Me

as F. S me me

as Me L me me

as: E Ma L

S. Ma L

as. ma L me me me

as. E. Ma L ma me No

as Ma Me. L me Ma w. No

as. me me me me

as E Me S me me No

as ~~Me~~ me ~~Me~~ ma No

E ma L me me No

as. E. Ma me. L me me No

as. Spr. Ma L me me No

5
1st. 1st. Pods
yellow mature Size Length Shape Seeds Pods
per Pod per Node Color

✓ Me $1\frac{1}{2}$ - $1\frac{3}{4}$ S.C. 2-3 2-5 Br

✓ Me $1\frac{1}{2}$ - $1\frac{3}{4}$ T 2-3 2-5 Br

✓ Me 2-2 $\frac{1}{4}$ Br 2-3 2-6 Gr

✓

✓ $1\frac{1}{2}$ -2 T 2-3 2-6 L

✓ $1\frac{1}{2}$ - $1\frac{3}{4}$ S.F. 2-3 2-6 D

✓ Me T 2-3 2-5 Dark

✓ L T 2-3-4 2-6 G

✓ Me $1\frac{1}{2}$ -2 S.F. 2-3 2-6 T

✓ Me $1\frac{1}{4}$ - $1\frac{3}{4}$ T 2-3 2-5

✓ Me $1\frac{1}{2}$ - $1\frac{3}{4}$ T 2-3 2-6 Str

Me $1\frac{1}{4}$ -1.5 T 2-3 1-4 L

✓ Me $1\frac{1}{4}$ - $1\frac{1}{2}$ S.F. 2-3 2-6 T

✓ Me $1\frac{1}{2}$ -2 T 2-3 2-6 G

Me $1\frac{1}{2}$ -2 Gr 2-2 2-6 Gr

Pubescence	Seed	Insect
Color	Color	Injury

G. T.	Me	
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G. T	Me	
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G	Me	
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G	Me	S. Y.
---	----	-------

Gr	Me	O. Br
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G - T 98%	Me	
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g	Me	
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Tawny	Me	
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Gray	Me	
------	----	--

—	None	
---	------	--

b	Me	
---	----	--

T	Me	
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G. - T	Me	
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Gr some	Me	
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Tawny		
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No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
27902		2 rds		6/6/13		90 no
28020		2 rds		6/6/13		90 No
28049		8 rds				
28050	Purple	8 rds				
28051		8 rds				
30478		8 rds				
30593 ✓						
30594 ✓		8 rds				90 8rd
30595						
30596						
30597						
30598		2 rds		6/6/13		85 No
30598A		2 rds		6/6/13		85 No
30599		8 rds				
A (1913)						
30600		8 rds				90 Ex.
30601		8 rds				90 Ex.
30744 ✓		8 rds				
30745		8 rds				
-B (1913)						
30745A		1 rd				
30746	Horvair	8 rds				
A (1913)	tawny					

Bloom Maturity Stems
 Date Color ^{Har-}vested ^{Diam-}Season eter Height Type

7/10 P 9/22 30-36 V. astip In

7/10 P 9/22 30-36 V. astip

7/15 P W 9/9 20-26 B

7/18 P 9/9 20-24 B

7/19 P W 9/27 32-36 V. astip

8/6 P 10/30 24-30 B

7/11 W P 9/9 20-24 B

7/31 P 10/10 24-30 B

7/31 W 10/10 20-24 B

7/18 P W 9/15 24-30 B

9/15 18-24 B

7/18 P W 9/9 20-24 B

7/18 P W 9/9 20-24 B

7/18 W P 9/15 18-36 B

9/15 18-36 B

7/18 P

7/18 W-P 9/15 16-30 B

Branches			Leaves			
Habit	No.	Height	Size	No.	Color	Per sisting

as. Spr. Ma L Me Ma Me

as. Spr. Ma L Me Ma Me

as Ma S Me Me No

as Ma Me Me Me No

as Ma Me's Me Me No

as Ma Me L Me No

as Ma L Me Me D Me

as Spr. Me Me Me Ma No

as FF S Me Ma No

as Ma L Me Me W 9 No

as Ma L Me Me No

as Ma L Me Me W 9 No

as Ma L Me Me 9 No

as Ma L Me Me 9 No

as Ma L Me Me No

as Ma L Me Me 9 No

e 5

1st. 1st. Seeds Pods
yellow mature Size Length Shape per pod per Node Color

Pods

✓	Me	1½-2	M.F.	2-3-4	2-6	G-T
✓	Me	1½-2	M.F.	2-3-4	2-6	G-T
✓	Me	1½-2	T	2-3	2-5	L Br
✓	Me	1½-1¾	T	2-3	3-5	Dark
✓	Me	1¾-1½	S.C.	2-3	2-5	Br
✓	L	2-2½	M.F.	2-3	2-6	Br
✓	Me	1¼-¾	T	2-3	2-5	Dr Br
✓	Me	1½-1¾	T	2-3	2-6	T
✓	Me	1½-2	T	2-3	2-6	T
✓	Me	1½-2	T	2-3	2-4	T
✓	Me	1½-2	T	2-3	2-4	G
✓	Me	1¼-1¾	T	2-3	1-5	Dark
✓	Me	1¼-1½	T	2-3	1-5	Dark
✓	Me	1½-2		2-3	2-6	T
✓	Me	1½-2		2-3	2-5	G
	Me	1½-2		2-3	2-6	G

Pubescence Color	Seed Amit. Color	Insect Injury	Stem
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S. T	Me		
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S. T.	Me		
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Gray	Me		
------	----	--	--

Gray	Me		
------	----	--	--

Tawny	Me		
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Tawny	Me		
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T	Me		
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T	Me		
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T. Ga	Me		
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Tawny	Me		
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Gray	Me		
------	----	--	--

Gray	Me		
------	----	--	--

Gray	Me		
------	----	--	--

Gray	Me		
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Tawny			
-------	--	--	--

Gray	Me		
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90

Diseases			Yield		Seed Color	Seed Rank
% Rust	% Wilt	% Nematode	Forage Green lbs.	Forage Dry lbs.		

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Plants %	Uni- formity
30747		8 rds					
31551		2 rds		6/6/13		90	yes
31802		2 rds	2 rds	6/6/13		60	yes
31803		2 rds				85	no
31804		2 rds	2 rds	6/6/13		85	yes
31867	Mammoth					75	
32550		2 rds					
32361		2 rds		6/6/13			
32550							
32494		8 rds				90	
32503		8 rds				45	
32511		8 rds				98	
32518		8 rds				98	
32519		8 rds				98	
32525		8 rds				60	
32526		8 rds				98	
32528		8 rds				65	
32534		8 rds				95	
32534A		8 rds				90	
32542		2 rds					
32566						98	
32574		8 rds				90	
32582						20	

[illegible]

Branches				Leaves		
Habit	No.	Height	Size	No.	Color	Per-sisting

As.	Me	Me	Me	m		no
as. G.	Me	2	Me	Ma	-	no
as. G.	Ma	4	Me	Me		no
as. G.	Ma	2	Me	Me		no
as. G.	Ma	4	Me	Me		no
as	F	me	Me	Ma		no

as. G. Ma Me Ma

es
1st. 1st.
yellow mature

Pods

Size Length Shape Seeds per Pod Pods per Node Color

In

M	1 1/2 - 2	T	2-3	2-5	T
M	1 1/2 - 1 3/4	T	2-3	2-5	T
✓ M	1 1/4 - 1 1/2	T	2-3	2-5	T
✓ Me	1 1/2 - 1 3/4	T	2-3	2-5	T
✓ Me	1 1/2 - 1 3/4	T	2-3	2-5	T
✓ Me	1 1/4 - 1.5	T	2-3	1-4	L

1 1/2 - 1 3/4

M 1 1/4 - 1 3/4 M.F. 2-3 3-6 T

1 1/2 - 1 3/4

Pubescence

Seed Insect
Color Injury

~~F~~ ~~Pubes~~ ~~Root~~
x

T Me

T me

T Me

T Me

G Me

T M

Diseases			Yield		Seed	Seed	Rank
% Rust	% Wilt	Nt-% matode	Forage Green lbs	Dry lbs	lbs.	Color	

Rather late
 + in smth.
 In Good Try
 again
 Bl. Good
 try again
 Bl. not D
 much promise

Like Peking
 of seed

Like Peking
 of seed

Like Peking

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
32648						
32649		8 rds				
32906	Va.	8 rds		2/21/13		
32907	Palming	8 rds		1/6		
34645		2 rds		1/6		
34654		2 rds		1/6		60 yes
34977		2 rds		1/6		80 yes

Bloom Date	Color	Maturity Har-vested Season	Stems Diam-eter Height	Type
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9/15 P

7/8 P W 9/9 95 Me 18-30 B

8/11 P 10/20 Me 44-52 V

7/28 P W 9/29 115

7/23 P 9/25 111 Me 12-16 B

7/31 W 10/5 Me 24-30 V at T

Branches			Leav		
Habit	No.	Height	Size	No.	Color
					Per-sisting

As. E. Me Me

No

E. as Ma L

as. L

as. E. Me L Me Me

No

as. E. Ma L Me Ma

No

es	1st.	1st.	Size	Length	Shape	Seeds per Pod	Pods per Node	Color
yellow		mature						

Pods

1 1/2 - 2 T 2-3 -

1 1/2 - 2 7 2-3 2-6 B

Me 1 1/4 - 1 3/4 T 2-3 2-5 L

Me 1 1/4 - 1 3/4 T 2-3 2-5 B

Pubescence Color	Seed Amit. Color	Insect Injury
---------------------	---------------------	------------------

T - G

T

h

h

Diseases			Yield		Seed lbs.	Seed Color	Rank
% Rust	% Wilt	% Nem. atode	Forage Green lbs.	Dry lbs.			

Badly mixed

Like 1726
very poor
Fairly good
Try again

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
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Bloom	Maturity	Stems
Date	Color	Har-vested
		Season
		Diam-eter
		Height
		Type

Branches

Leav

Habit

No.

Height

Size

No.

Color

Per-
sisting

es		Pods				
1st.	1st.				Seeds	Pods
yellow	Mature	Size	Length	Shape	per Pod	per Node
						Color

Pubescence	Seed	Insect
Color	Amt. Color	Injury

[illegible]

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
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Bloom Maturity Stems
Date Color Har- vest Season Diam- eter Height Type

Branches

Leaf

Habit

No.

Height

Size

No.

Color

Per-
sisting

es

1st. 1st.

yellow

Pods

Mature Size Length Shape Seeds per Pod Pods per Node

Pubescence Seed Insect
Color Am't. Color Injury

Color Am't.

Color

[illegible]

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
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Bloom Maturity Stems
Date Color ^{Har-}vested ^{Diam-}Season eter Height Type

Branches			Leav		
Habit	No.	Height	Size	No.	Color
					Per- sisting

es

1st.

yellow

1st.

mature

Size

Length

Shape

Seeds

per Pod

Pods

per Node

Color

Pods

Pubescence	Seed	Insect
Color	Color	Injury

Pubescence
Color Amt.

Seed
Color

Insect Injury

Diseases			Yield		Seed	Seed	Rank
^{o/o} Rust	^{o/o} Wilt	^{o/o} Nem- atode	Forage Green lbs.	Dry lbs.	lbs.	Color	

[illegible]

Bloom	Maturity	Stems
Date	Har- vested Season	Diam- eter Height Type

Branches

Leav

Habit

No.

Height

Size

No.

Color

Per-

sisting

es

1st.

1st.

yellow

mature

Size

Length

Shape

Seeds

per Pod

Pods

per Node

Color

Pods

Pubescence	Seed	Insect
Color	Amt.	Color
		Injury

Color

Amit.

Color

Injury

[illegible]

No.	Variety	Length of Row	Width of Row	Date Sown	date Up	Stand No. Uni- Plants formity
-----	---------	---------------------	--------------------	--------------	------------	-------------------------------------

Bloom	Maturity		Stems
Date Color	Har-vested Season	Diam-eter	Height Type

Branches				Leave		
Habit	No.	Height	Size	No.	Color	Per- sisting

Leave

Per-

Habit

No.

Height

Size

No.

Color

sistino

5

Pods

1st. yellow	1st. Mature	Size	Length	Shape	Seeds per Pod	Pods per Node	Color
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Pubescence	Seed	Insect
Color	Amit. Color	Injury

[illegible]

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
-----	---------	---------------------	--------------------	--------------	------------	-------------------------------------

Bloom	Maturity	Stems
Date Color	Har-vested Season	Diam-eter Height Type

Habit	No.	Height	Size	No.	Color	Leaves per sisting

es

1st.

1st.

yellow mature Size Length Shape Seeds per Pod Pods per Node Color

Pods

Pubescence Seed Insect
Color Amt. Color Injury

[illegible]

[illegible]

Bloom		Maturity	Stems			
Date	Color	Har-vested	Season	Diam-eter	Height	Type

Branches				Leave		
Habit	No.	Height	Size	No.	Color	Per- sisting

						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

[illegible]

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2
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						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

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1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

						Pods	
1st.	1st.					Seeds per Pod	Pods per Node
yellow	mature	Size	Length	Shape	Color		

Pubescence	Seed	Insect
Color	Amt.	Injury

[illegible]

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formit
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Bloom Maturity		Stems	
Date	Color	Har-vested Season	Diam-eter Height Type

Branches

Leav

Habit

No.

Height

Size

No.

Color

Per-
sistine

es
1st. 1st. Pods
yellow mature Size Length Shape Seeds Pods
per Pod per Node Color

Pubescence	Seed	Insect
Color	Amit. Color	Injury

Diseases			Yield		Seed	Seed	Rank
% Rust	% Wilt	% Nem- atode	Forage Green lbs.	Dry lbs.	lbs	Color	

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- Plants formity
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Bloom Maturity Stems
Date Color Har- vested Season Dign- eter Height Type

Date Color

Har-
vester

Season

Digm-
eter

Height

- Type

Branches			Leav		
Habit	No.	Height	Size	No.	Color ^{Per-} sisting

Pubescence	Seed	Insect
Color	Amit. Color	Injury

Diseases			Yield		Seed	Seed	Rank
% Rust	% Wilt	% Nem- atode	Forage Green lbs.	dry lbs.	lbs.	Color	

No.	Variety	Length of Row	Width of Row	Date Sown	Date Up	Stand No. Uni- plants formity
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Bloom	Maturity	Stems
Date	Color	Har- vested
	Season	Diam- eter
	Height	Type

Stems

Har-

Diam-

vested

Diam-
eter

Height Type

Branches			Leaves			
Habit	No.	Height	Size	No.	Color	Per- sisting

Lea v

Per-

sisting

es

1st.

1st.

yellow mature

Size

Length

Shape

Seeds

Pods

per Pod

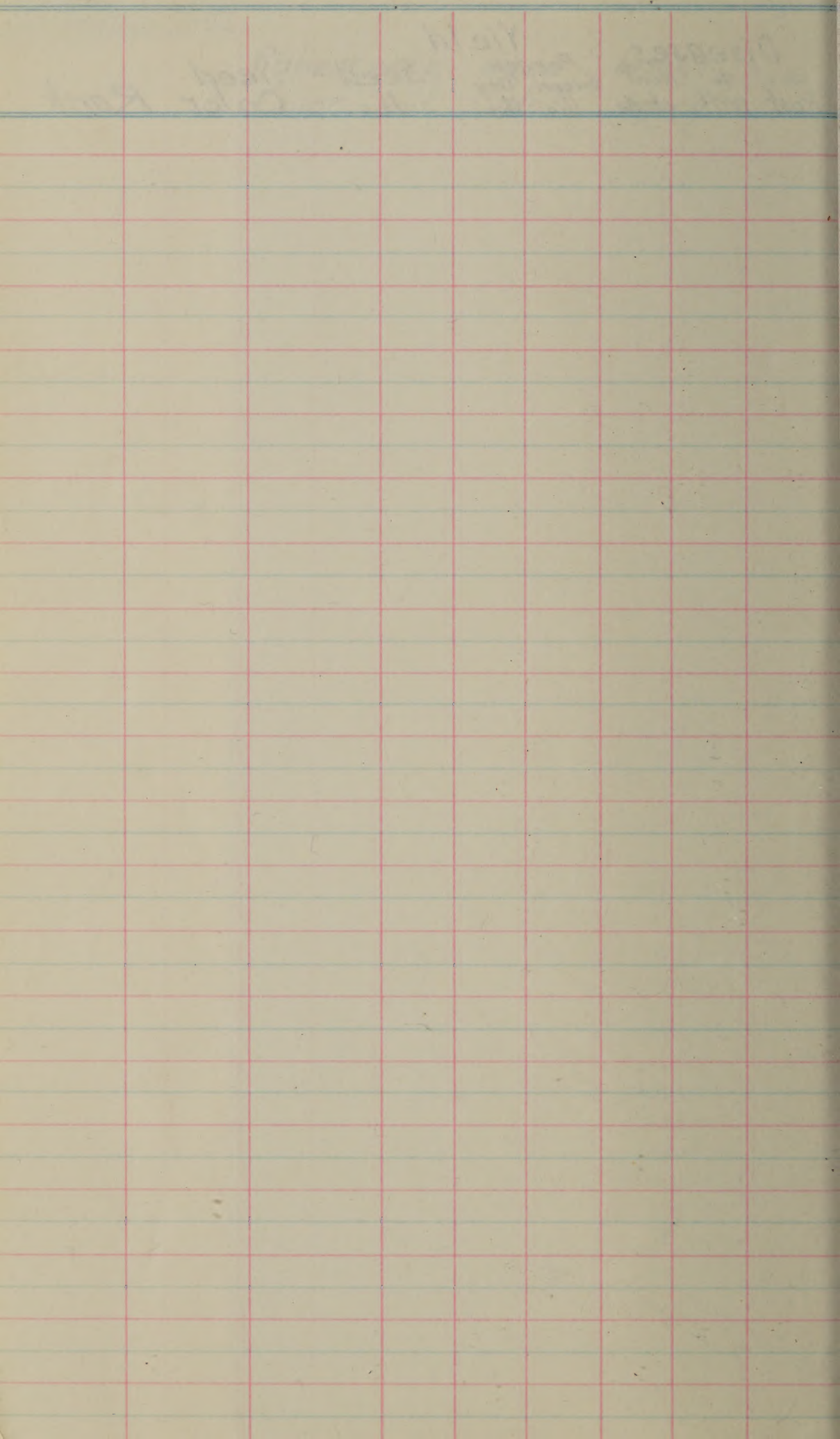
per Node

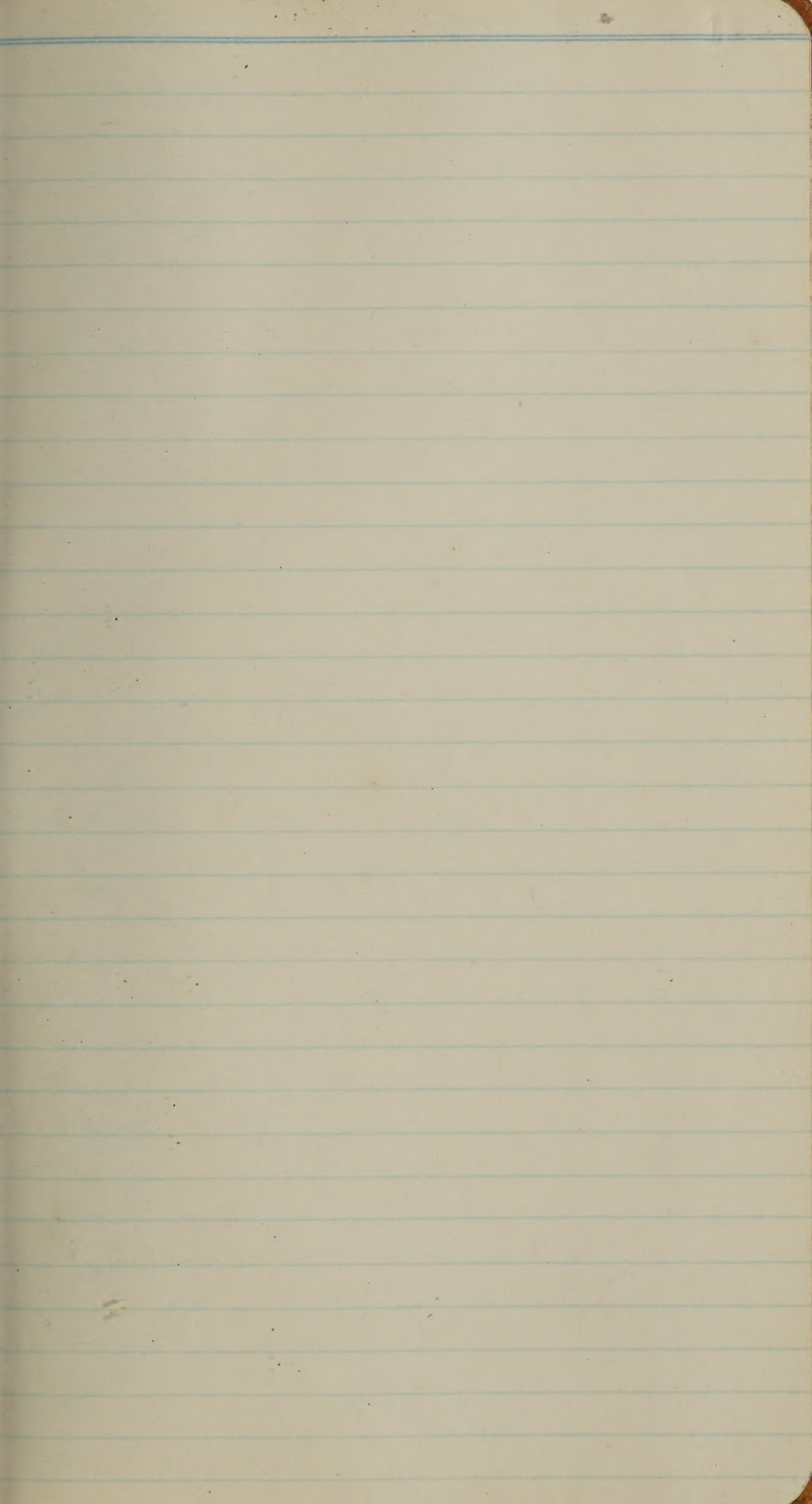
Color

Pods

Pubescence	Seed	Insect
Color	Amit. Color	Injury

Diseases			Yield		Seed	Seed	Rank
% Rust	% Wilt	Nem. atode	Forage Green lbs.	Dry lbs.	lbs.	Color	





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